

**SPACE WEATHER INFORMATION AND FORECAST SERVICES  
(SWIFtS)**

**WEEKLY SPACE WEATHER NEWS**

Periode: February, 10<sup>th</sup> – 16<sup>th</sup> 2017

**SOLAR ACTIVITY**

The Sun is entering the minimum activity phase and its last week activity was considered quiet with maximum B2.3 occurred on February 16 peaked from NOAA 2636. Within a week, a couple active with low complexity (NOAA 2630, 2631, 2632, 2634, 2635, 2636) emerged on the disk. There was no geoeffective coronal mass ejection that significantly disturbed space weather on Earth. Next week, Solar activity is expected to remain quiet.

**GEOMAGNETIC ACTIVITY**

Geomagnetic activities during February, 10<sup>th</sup> –16<sup>th</sup> 2017 were in quiet level. The maximum value of K and Kp index was 3 and 2. The minimum Dst index was -23 nT on February 10<sup>th</sup>, 2017. Solar wind were in normal condition with the speed was about 450 km/s and IMF were -5 to 5. The geoeffective coronal holes located at northern hemisphere with polarity (+) on February 10<sup>th</sup> until February 15<sup>th</sup>, 2017 and at equator is still geoeffective from February 13<sup>th</sup>, 2017 with polarity (+). In a week, substorm occurred with intensity less than 1000 nT on 10<sup>th</sup> January, 2017. Electron flux was in very high condition on February 10<sup>th</sup>, 2017 and others were in high condition.

**IONOSPHERIC ACTIVITY**

Ionosphere conditions in this week were dominantly in quiet level.

The Moderate level disturbances in the ionosphere was occurred only for one day due to the depression of critical frequencies of *F/F2* layers (*foF2*) for more than 1 hours in 14<sup>th</sup> February 2017. The *foF2* depressions were impacted to the radiowave propagation over the ionosphere which known as the *MUF Depression*. Although the *foF2* experienced depression, the minimum frequencies (*fmin*) of the ionosphere in this week were in normal conditions. There was no increment of *fmin* that could be a source of disturbance in the HF radio communication which known as *Shortwave Fadeout* (SWF) or *Radio Blackout* (RB). Based on the observations using GISTM over Bandung, Biak and Manado the scintillation (*s4*) condition for this week were quiet level. Similar to the *s4* conditions, the error positioning conditions were between normal to slight levels conditions that determined by the index *W* values.

*For daily space weather information and forecast, please refer to our **Space Weather Information and Forecast Services (SWIFtS)** official website at [swifts.sains.lapan.go.id](http://swifts.sains.lapan.go.id) or please e-mail us for request by facsimile*



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